PACKERS AND STOCKYARDS STATISTICAL REPORT
2002 REPORTING YEAR

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INTRODUCTION

Reporting Firms

This report contains data on (1) slaughtering packers; (2) market agencies buying or selling livestock on commission, including auction markets and all other selling agencies; and (3) livestock dealers buying and selling livestock for their own accounts. It includes data for firms' 2002 reporting year. Part III of the report includes data on all entities registered with the Grain Inspection, Packers and Stockyards Administration.

All slaughtering packers operating in commerce in the United States have been subject to the Packers and Stockyards Act since its passage in 1921. Section 201.97 of Chapter 9 of the Code of Federal Regulations requires every packer, live poultry dealer, stockyard owner, market agency, and dealer, unless exempt, to file a report annually with the U.S. Department of Agriculture's (USDA) Grain Inspection, Packers and Stockyards Administration (GIPSA). Prior to reporting year 1977, packers slaughtering less than 1,000 head of cattle or less than 2,000 head of all classes of livestock annually were exempted from the reporting requirements. Beginning with reporting year 1977, packers that operate in interstate commerce and purchase $500,000 or more of livestock on an annual basis are required to file an annual report with GIPSA. Since both slaughter volume and the value of purchases vary from year to year, certain small slaughtering packers are required to file an annual report in some years but not in others. Packers beginning operation late in their fiscal years are not required to file annual reports for a partial year. Also, packers going out of business are not required to file annual reports.

A number of firms that primarily slaughter livestock for others (custom slaughterers) are not required to file annual reports with GIPSA and their data are not included in this report. In 2002, 238 firms operating 321 plants reported to GIPSA (see table 1). In comparison, on January 1, 2002, there were 881 federally inspected plants and 2,326 non-federally inspected plants (see table 4). Many of these plants operated solely or primarily as custom slaughterers and were not required to file reports with GIPSA because the firms did not purchase more than $500,000 worth of livestock annually.

The following table compares the number of plants operated by firms reporting to GIPSA in 2002 with all federally inspected (F.I.) plants by type of livestock and number of head. The number of plants reported by firms to GIPSA is based on livestock procured for slaughter and does not count livestock the plants custom-slaughter for others. The number of F.I. plants includes all livestock slaughtered regardless of who owned the livestock.

Number of plants operated by firms reporting to GIPSA and number of federally inspected (F.I.) plants, 2002

	GIPSA		Federally inspected	
Type of livestock	Less than 1,000 head	All plants	Less than 1,000 head	All plants
Cattle	32	169	529	706
Calves	29	63	191	268
Hogs	19	175	433	683
Sheep/lambs	23	54	445	525

Packers reporting to GIPSA accounted for the following percentages of commercial slaughter in 2002:

Type	Percent
Steers and heifers	96
Cows and bulls	89
Cattle	94
Calves	82
Hogs	97
Sheep and lambs	81

Calendar Year/Reporting Year

In most cases, the calendar year and a packer's reporting year are the same. A majority of meat packers use the calendar year as their fiscal, or operating, year for accounting purposes. Many packers, however, use fiscal years that end in months other than December. GIPSA includes the data supplied by these packers in the year in which each packer's fiscal year ends. Thus, for example, data from a packer whose fiscal year ends May 31, 2002, is included in the 2002 reporting year.

Type of Outlet

Prior to 1988, GIPSA reported statistics separately for terminal markets, in which sales are made by private treaty, and for auctions, in which sales are made through open public bidding. Beginning in 1988, GIPSA combined livestock volumes sold through terminals and auctions, and reported those sales as "public markets" sales due to few terminal markets and the small numbers of livestock traded at terminal markets.

Consolidated Reports of Firms

Packing firms may elect to file consolidated reports for all of their slaughter operations unless the slaughter operations are bonded separately. Since 1980, annual reports filed by separately bonded units of a firm have been combined by GIPSA when reporting firm-level data, such as concentration ratios.

HIGHLIGHTS OF THIS REPORT

Concentration of Meatpacking Firms

This report contains two series of concentration ratios[1] for steers and heifers, cows and bulls, cattle, hogs, and sheep and lambs. The first is based on procurement data reported to GIPSA by packers, and includes all livestock procured for slaughter by each firm, including livestock custom-slaughtered for reporting packers by other firms and livestock slaughtered in State-inspected plants. The data are reported by firms for their fiscal years. The

[1]A concentration ratio is defined as the percentage of total activity (e.g., slaughter, livestock purchases) accounted for by the largest firms, usually the four largest firms.

second concentration series is based on slaughter data collected by USDA's Food Safety and Inspection Service (FSIS) from federally inspected plants. These data are for the calendar year. FSIS reports the number of animals slaughtered at each plant regardless of who owns the animals. GIPSA adjusts these data to reflect ownership of the animals based on information provided by reporting packers. Both series use total commercial slaughter for the calendar year as the denominator for calculating concentration ratios. The discussion that follows is based on concentration ratios calculated using the adjusted FSIS data.

The four-firm concentration ratio for steer and heifer slaughter has been relatively stable since the mid–1990s. The ratio increased from 79 percent in 2002 to 80 percent in 2003. The HHI decreased from 1,909 in 2001 to 1,842 in 2002 (see table 27). Steer and heifer slaughter has the highest 4-firm concentration ratio in the red meatpacking industry.

Four-firm concentration in cow and bull slaughter increased from 24 percent in 1992 to 32 percent in 2000, and increased to 44 percent in 2003 (see table 28). The HHI rose from 520 in 2001 to 598 in 2002.

After reaching a high of 70 percent in 1999, four-firm concentration in cattle slaughter declined slightly, ranging between 68 percent and 70 percent from 2000 to 2003 (see table 29). A broader measure of concentration, the Herfindahl–Hirschman Index[2] (HHI), decreased from 1,422 in 2001 to 1,399 in 2002.[3]

Four-firm concentration in hog slaughter rose nearly 10 percentage points to 55 percent in the mid–1990s, but has been relatively stable between 54 percent and 57 percent during 1997–2002. The ratio increased to 65 percent in 2003 due to Smithfield's acquisition of Farmland (see table 31). The HHI fell from 1,035 in 2001 to 1,005 in 2002.

Four-firm concentration in sheep and lambs has averaged between 65 percent and 73 percent since 1992 and was 65 percent in 2003 (see table 32). Based on the information reported to GIPSA, the HHI was 1,223 in 2002.

Overall concentration in the red meatpacking industry increased markedly during 1980s. In 1980, the four largest firms (in terms of total dollar amount spent for all livestock slaughtered) accounted for less than 26 percent of all livestock procured for slaughter (see table 34). Concentration increased slowly until 1986, and then increased from 37 percent to 47 percent in 1987. Concentration continued to increase, reaching 63 percent in 1993. Four-firm concentration was relatively stable at about 62 to 63 percent between 1993 and 1998, and then increased to 66 percent in 2000. The ratio fell to 65 percent in 2002. The HHI was 1,234 in 2002.

Number and Size of Plants

The total number of packing plants operated by firms reporting to GIPSA continued to fall, declining from 340 in 2001 to 321 in

[2] The HHI is defined as the sum of each firm's squared percentage of market share. The Department of Justice and the Federal Trade Commission consider markets to be unconcentrated when the value of the HHI is below 1,000, moderately concentrated when HHI is between 1,000 and 1,800, and highly concentrated when HHI is above 1,800. (U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines, issued April 2, 1992, revised April 8, 1997).

[3] HHI values are not available for 2003.

2002 (see table 1). The number of plants slaughtering cattle declined by about 10 percent, calves 10 percent, hogs 5 percent, and sheep and lambs 16 percent (see table 3).

While the overall number of packing plants operated by reporting packers has fallen over the years, the number of slaughter plants in the largest size categories has remained relatively steady (see tables 18 through 24). The number of slaughter plants in the smallest size category (slaughtering less than 1,000 head) for cattle, calves, hogs, and sheep and lambs decreased in 2002.

Specialization of Packers

The total number of reporting meatpackers dropped from 810 in 1980 to 238 in 2002. Table 25 shows that most of the decline occurred among firms that slaughter two or more types of livestock. Since the mid–1990s, the majority of packers purchasing more than $5 million worth of slaughter livestock has specialized in only one type of livestock. Table 26 shows the trend in percentage terms. The proportion of packers slaughtering only one type of livestock has risen steadily from about 17 percent in 1980 to 53 percent in 2002.

Use of Public and Nonpublic Marketing Channels

Packer purchases at public markets include purchases at auction and terminal markets at public stockyards, and video auctions. Purchases through nonpublic marketing channels include direct purchases by packers at their plants, packer-owned buying stations, feedyards, and from dealers.

The proportion of all types of livestock bought by packers in public markets declined in 2002 except calves (see table 5). Most of the changes were less than 2 percentage points. The use of public markets by calf packers dropped from more than 50 percent of their total calf purchases in the early 1980s to less than 20 percent in the early 1990s. Since 1995 it has fluctuated between 22 percent and 29 percent. Calf packers' use of public markets increased from 22 percent in 2001 to 24 percent in 2002. Hog packers' use of public markets continued to decline in 2002, to about 2 percent of their total hog purchases. The proportion of sheep and lambs bought by packers in public markets was fairly constant from the early 1980s through the mid–1990s, ranging between 16 percent and 21 percent. The proportion fell to about 10 percent in 2002 from 17 percent in 1998.

The proportion of slaughter cattle purchased in public markets has been relatively stable at 13 percent to 14 percent since the early 1990s, and was 13 percent in 2002. In 2002, more than 70 percent of cattle purchased at public markets were cows and bulls. Packers purchased about 57 percent of their slaughter cows and bulls through public marketing channels, but only about 4 percent of slaughter steers and heifers were purchased through public markets (see tables 8 and 9).

Packers used public markets much more frequently to purchase steers and heifers in the South Atlantic region than in other regions (see table 8). Packers used public markets to purchase the majority of their slaughter cows and bulls in every region except the Southern Plains and East North Central regions (see table 9). Packers' use of public marketing channels to purchase cattle varies geographically (see table 10).

Hog slaughterers showed much less regional variation in their use of public markets (see table 12). In 2002, in all regions except the North Atlantic, packers purchased less than 3 percent of their hogs in public markets, while packers in the North Atlantic region procured about 15 percent of their hogs through public markets.

Smaller packers continued to rely on public markets for their slaughter needs more than larger packers (see table 6). The four largest packers procured the smallest proportion of their slaughter needs in public markets compared with other packers, and the proportion grew as packer size decreased. In 2002, the 20 largest packers procured 11 percent of their cattle and less than 1 percent of their hogs through public markets. In contrast, packers smaller than the top 20 procured 35 percent of their slaughter cattle and 12 percent of their hogs through public markets.

Carcass-Basis Procurement

The proportion of slaughter livestock purchased on a carcass basis (such as grade, weight, yield, guaranteed yield, or percentage lean) in 2002 ranged from 43 percent for calves to 74 percent for hogs (see table 14). The percentage of cattle purchased on a carcass basis continued rising to an all-time high of 63 percent in 2002 (see table 15). About 43 percent of all slaughter calves bought in 2002 were procured on a carcass basis. The proportion of hogs purchased on a carcass basis rose from 72 percent in 2001 to 74 percent in 2002, and was the highest among all types of slaughter livestock. The percentage of sheep and lambs purchased on a carcass basis fell from 70 percent in 2001 to 60 percent in 2002.

The 20 largest packers, based on total amount spent for all livestock slaughtered, purchased a larger percentage of cattle and hogs on a carcass basis than did other packers (see table 15). In 2002, the 20 largest packers purchased 83 percent of their hogs and 64 percent of their cattle on a carcass basis, compared to other packers who purchased 21 percent of their hogs and 50 percent of their cattle on a carcass basis.

Packer Feeding, Forward Contracts, and Marketing Agreements

GIPSA defines captive supplies as livestock that are owned or fed by a packer more than 14 days prior to slaughter, livestock that are procured by a packer through a forward contract or marketing agreement that has been in place for more than 14 days, or livestock that are otherwise committed to a packer more than 14 days prior to slaughter. This definition includes animals procured through forward contracts, marketing agreements, and packer feeding arrangements.

GIPSA audited the top four firms' captive supply filings for steers and heifers from 1999 to 2002. Table 16 contains statistics calculated from unaudited data reported by the top 15 packers for 1988–98 and audited data for the top four firms from 1999 to 2002. Table 17 shows monthly variation in use of captive supply by the four leading steer and heifer packers.

The top four steer and heifer packers' use of marketing agreements rose from 21 percent in 1999 to about 32 percent of their total steer and heifer procurement in 2002 (see table 16). The top four steer and heifer packers' use of forward contracts declined slightly from 3.3 percent in 1999 to 2.4 percent of their total steer and heifer procurement in 2002. Packer feeding of steers and heifers by the top four firms ranged from 8 percent to 11 percent of their total slaughter from 1999 to 2002, and was about 10 percent in 2002. Overall, in 2002, the use of all forms of captive supplies by the top four steer and heifer packers rose to 44 percent, its highest level.

Packer Financial Performance

Tables 35 through 39 present financial ratios for several groupings of the 40 largest meatpacking firms. Firms are ranked by total amount spent for all livestock slaughtered. All firms included in these tables slaughter livestock. Some of the firms also further process carcasses, and some have large non-red meat operations. Often these firms file financial statements only for their red meat operations. However, a few firms file consolidated financial statements in which their meatpacking and processing operations are combined with their other operations. Thus, the financial statistics calculated from some packers' reports may include the financial performance of non-meat operations of some firms.

Profitability (measured by operating income as a percentage of sales) of the 40 largest meat packers has fluctuated widely since 1992 (see table 39). In 1992 and 1993, profitability of the top 40 firms was 1.2 percent of sales. Profitability rose to 2.9 percent of sales in 1994 and 3.7 percent in 1995. Profitability declined to between 1.8 percent and 2.4 percent during 1996–98. Profitability of the top 40 firms was 2.2 percent in 2002.

Throughout the 1992–2000 period, the 20 largest packers reported operating income as a percentage of sales than packers ranked 21 through 40. This relative positions reversed in both 2001 and 2002. Throughout the 1992–2002 period, for operating income, firms ranked 9 through 20 reported larger profits than the top 4 or top 8 packers.

The top four firms generally have operated on smaller gross margins (also known as gross income) than smaller firms (see tables 35 and 37). Between 1993 and 2001, the top four firms reported gross margins as a percentage of sales that were 11 to 20 percentage points below firms ranked 5 through 8 (see table 37). In 2002, all groups by firm size reported close gross margins as a percentage of sales, ranging from 21 percent to 25 percent. The top four packers' operating expense ratios were also relatively lower than firms ranked 5 through 8 (see tables 35 and 38). The top four firms reported higher net sales per dollar of assets and higher equity to asset ratio than any other groups in 2002 (see table 36).

Auction and Terminal Market Purchases

The number of cattle and calves marketed through firms selling on commission was 37.7 million in 2002, down from the 39.2 million head marketed in 2001. The number has fluctuated between 38 million and 42 million since 1995 (see table 42). The volume of hogs marketed through firms selling on commission followed a downward trend throughout the 1990s, falling to 7.7 million head in 2000. The number increased slightly to 7.8 million in 2001, but fell to 6.5 million in 2002. The number of sheep and lambs marketed through firms selling on commission fluctuated during 1990s. The highest volume was 5.7 million head in 1996 and the lowest was 3.9 million in 2000. The number of sheep and lambs marketed through firms selling on commission increased to 4.2 million head in 2002.

Livestock Purchases by Dealers and Order Buyers

Purchases of cattle and calves by dealers and order buyers[4] fell to 31.9 million head in 2002 (see table 42). Purchases of hogs by dealers and order buyers increased slightly in 2002, to 19.5 million head, which was still 55 percent below the highest level of the decade, reached in early1990s. The number of sheep and

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[4] Order buyers purchase on a commission basis for others.

lambs purchased by dealers and order buyers in 2002 fell to 2.9 million head from 3.3 million head in 2001.

MERGERS AND ACQUISITIONS IN MEAT PACKING

Numerous mergers and acquisitions have occurred in meat packing during the past several years. The following table lists mergers and acquisitions in 2002 and 2003 involving at least one firm that is required to file an annual report with GIPSA. Most transactions involved the purchase of entire firms; one, which is noted, included only one plant.

Meat Packer Mergers and Acquisitions, 2002–2003
(Listed by alphabetical order of acquiring company)

2002

Acquiring Company: Booth Creek Management Corporation; Vail, CO.
Company Acquired: B3R Country Meats; Childress, TX.

Acquiring Company: Booth Creek Management Corporation; Vail, CO.
Company Acquired: Coleman Natural Products; Denver, CO.

Acquiring Company: Booth Creek Management Corporation; Vail, CO.
Company Acquired: Gerhard's Napa Valley Sausage; Napa CA.

Acquiring Company: Excel Corporation; Wichita, KS.
Company Acquired: Taylor Packing Co.; Wyalusing, PA.

Acquiring Company: An investment group led by Hicks, Muse, Tate & Furst; Dallas, TX.
Company Acquired: ConAgra Red Meats, to be known as Swift and Company; Omaha, NE.

2003

Acquiring Company: Agri Beef Co.; Boise, ID.
Company Acquired: Washington Beef; Toppenish, WA.

Acquiring Company: Creekstone Farms; Campbellsburg, KY.
Company Acquired: Processing plant formerly run by Future Beef Operations; Arkansas City, KS.

Acquiring Company: National Beef Packer, Kansas City, MO.
Company Acquired: Farmland Industries, Kansas City, MO.

Acquiring Company: Smithfield Foods, Inc.; Smithfield, VA.
Company Acquired: Farmland Foods, Kansas City, MO.

Acquiring Company: Strauss Veal, Inc.; Franklin, WI.
Company Acquired: Silverton Ridge Farms, Chicago, IL.